

## Product datasheet for **RC202847L2V**

### DDIT4 (NM\_019058) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	DDIT4 (NM_019058) Human Tagged ORF Clone Lentiviral Particle
Symbol:	DDIT4
Synonyms:	Dig2; REDD-1; REDD1
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_019058
ORF Size:	696 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC202847).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_019058.2</a>
RefSeq Size:	1752 bp
RefSeq ORF:	699 bp
Locus ID:	54541
UniProt ID:	<a href="#">Q9NX09</a>
Cytogenetics:	10q22.1
Protein Pathways:	mTOR signaling pathway
MW:	25.4 kDa



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**Gene Summary:**

Regulates cell growth, proliferation and survival via inhibition of the activity of the mammalian target of rapamycin complex 1 (mTORC1). Inhibition of mTORC1 is mediated by a pathway that involves DDIT4/REDD1, AKT1, the TSC1-TSC2 complex and the GTPase RHEB. Plays an important role in responses to cellular energy levels and cellular stress, including responses to hypoxia and DNA damage. Regulates p53/TP53-mediated apoptosis in response to DNA damage via its effect on mTORC1 activity. Its role in the response to hypoxia depends on the cell type; it mediates mTORC1 inhibition in fibroblasts and thymocytes, but not in hepatocytes (By similarity). Required for mTORC1-mediated defense against viral protein synthesis and virus replication (By similarity). Inhibits neuronal differentiation and neurite outgrowth mediated by NGF via its effect on mTORC1 activity. Required for normal neuron migration during embryonic brain development. Plays a role in neuronal cell death. [UniProtKB/Swiss-Prot Function]